# Improving Inpatient Psychiatric Payment Methods

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# Objectives

- Brief history of inpatient payment for psychiatry
- Design DRGs and APR-DRGs
- Development and testing of improvements using existing billing data and new data to be abstracted from medical records
- Development and testing of performance measure for inpatient psychiatry

# Brief History

- Medicare payment cost-based until FY84 when DRGs introduced.  Failure of psychiatric DRGs led to TEFRA payment for inpatient psychiatry.
- Medicare Modernization Act of 2003 led to a new inpatient psychiatric payment system, prospective per diem payment.
- Inpatient psychiatry largely missing from performance measurement and from Pay for Performance.

# Construction of DRGs

- DRGs used for Medicare payment developed by statistically clustering hospital discharges to make homogenous length of stay groups. Not always clinically meaningful. *DRGs use complicating conditions modifier (CC).*
- APR-DRGs developed using clinical panels who identified clinically meaningful clusters and then tested statistically. *Uses 4 levels of severity within each cluster.*

# Explanatory Power of DRGs

- DRGs explain 3% of variance in Maryland hospital LOS and APR-DRGs explain 7%.
- Medical-Surgical DRGs explain 20-40%.
- Impact of low explanatory power:
  - Payment is not closely related to resource use.
  - Treating more difficult and severe patients likely not to be paid equitably.

# Improving DRG and APR-DRG

- Two step process is underway.
- Step 1: Examine options for improving psychiatric APR-DRGs using existing billing data.
- Step 2: Abstract a sample of medical records for Maryland psychiatric admissions to obtain admission and treatment characteristics expected to explain variations in LOS and costs.

# APR-DRG Explanatory Power for Psychiatric LOS and Charges

| APR-DRG in Maryland | Discharges: Jan 2006 – June 2007 | % Variance for Length of Stay | % Variance for Charges |
|---|---|---|---|
| 740 MI with O.R. procedure | 104 | **18** | **18** |
| 750 Schizophrenia | **9,947** | **<1** | **1** |
| 751 Maj. Depr.+other psychoses | **14,183** | **17** | **19** |
| 752 Personality disorders | 115 | **6** | **6** |
| 753 Bipolar Disorders | **14,433** | **7** | **8** |
| 754 Depression – not major | **4,576** | **5** | **5** |
| 755 Adjustment & neuroses | 1,075 | **8** | **12** |
| 756 Anxiety and delirium | 1,414 | **12** | **15** |
| 757 Organic MH disturbances | 1,221 | **4** | **12** |
| 758 Childhood behavioral | 456 | **2** | **2** |
| 759 Eating disorders | 181 | **4** | **4** |
| 760 Other mental disorders | 360 | **5** | **6** |

# APR-DRG Explanatory Power for Substance Abuse LOS and Charges

| **APR-DRG in Maryland** | **Discharges: Jan 2006 – June 2007** | **% Variance for Length of Stay** | **% Variance for Charges** |
|---|---|---|---|
| 770 Drug/Alcohol left AMA | **1,344** | **11** | **19** |
| 772 Drug/Alcohol w/ Rehab | 46 | **5** | 21 |
| 773 Opiod abuse/dependence | **5,548** | **8** | 26 |
| 774 Cocaine abuse/depend. | 815 | **12** | 25 |
| 775 Alcohol abuse/dependence | **4,756** | 20 | 32 |
| 776 Other Drug abuse/depend. | 850 | **8** | **17** |

# Options

- Redefine the 17 major clusters
- Reclassify severity levels within clusters using secondary diagnoses to improve explanatory power.
- In Step 2 we will add new data items from medical record abstracts and test their capacity to redefine major clusters and/or severity levels to improve explanatory power.

# Candidate Characteristics for Classifying Psychiatric Inpatient Epidodes

Admission Characteristics

- Previous Admission < 30 day
- Severe psychiatric diagnosis
- Suicidality
- Aggression
- Involuntary commitment
- Cognitive impairment
- Homeless
- Co-morbid medical

Treatment Characteristics

- Constant observation
- Restraints
- Seclusion
- Medications panel (refuses medications)
- ECT
- Clozapine

# Performance Measurement

- Interested in suggestions for performance measures
- Candidate measures to be evaluated include:
  - Use of restraints or seclusion
  - Medication adverse events
  - Co-morbid somatic disorders not present on admission
  - Co-morbid psychiatric disorders not present on admission
  - Post-discharge follow-up care
  - Re-admission post-discharge

# Current Status and Next Steps

## Current Status

- Working group is seeking to use existing billing data to improve APR-DRGs
- Data on costs being developed to link to discharge data

## Next Steps

- MD Psychiatric Society convening chiefs of psychiatry for meeting in June to get input.
- Simulation modeling of impact of APR-DRG improvements on distribution of revenues relative to costs.

# Contact information

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